

Information available	Tier	Stock status level	F_{OFL}	ABC control rule
B, B_{MSY}, F_{MSY} , and pdf of F_{MSY}	1	a. $\frac{B}{B_{msy}} > 1$	$F_{OFL} = \mu_A$ = arithmetic mean of the pdf	ABC $\leq (1-b_y) * OFL$
		b. $\beta < \frac{B}{B_{msy}} \leq 1$	$F_{OFL} = \mu_A \frac{\frac{B}{B_{msy}} - \alpha}{1 - \alpha}$	
		c. $\frac{B}{B_{msy}} \leq \beta$	Directed fishery $F = 0$ $F_{OFL} \leq F_{MSY}^{\dagger}$	
B, B_{MSY}, F_{MSY}	2	a. $\frac{B}{B_{msy}} > 1$	$F_{OFL} = F_{msy}$	ABC $\leq (1-b_y) * OFL$
		b. $\beta < \frac{B}{B_{msy}} \leq 1$	$F_{OFL} = F_{msy} \frac{\frac{B}{B_{msy}} - \alpha}{1 - \alpha}$	
		c. $\frac{B}{B_{msy}} \leq \beta$	Directed fishery $F = 0$ $F_{OFL} \leq F_{MSY}^{\dagger}$	
$B, F_{35\%}, B_{35\%}$	3	a. $\frac{B}{B_{35\%}^*} > 1$	$F_{OFL} = F_{35\%}^*$	ABC $\leq (1-b_y) * OFL$
		b. $\beta < \frac{B}{B_{35\%}^*} \leq 1$	$F_{OFL} = F_{35\%}^* \frac{\frac{B}{B_{35\%}^*} - \alpha}{1 - \alpha}$	
		c. $\frac{B}{B_{35\%}^*} \leq \beta$	Directed fishery $F = 0$ $F_{OFL} \leq F_{MSY}^{\dagger}$	
B, M, B_{msy}^{prox}	4	a. $\frac{B}{B_{msy}^{prox}} > 1$	$F_{OFL} = \gamma M$	ABC $\leq (1-b_y) * OFL$
		b. $\beta < \frac{B}{B_{msy}^{prox}} \leq 1$	$F_{OFL} = \gamma M \frac{\frac{B}{B_{msy}^{prox}} - \alpha}{1 - \alpha}$	
		c. $\frac{B}{B_{msy}^{prox}} \leq \beta$	Directed fishery $F = 0$ $F_{OFL} \leq F_{MSY}^{\dagger}$	
Stocks with no reliable estimates of biomass or M.	5		OFL = average catch from a time period to be determined, unless the SSC recommends an alternative value based on the best available scientific information.	ABC $\leq 0.90 * OFL$

*35% is the default value unless the SSC recommends a different value based on the best available scientific information.

\dagger An $F_{OFL} \leq F_{MSY}$ will be determined in the development of the rebuilding plan for an overfished stock.